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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/779,498

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Hiroshi Yoshida

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05/09/2005

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EXAMINER

BORISSOV, IGOR N

ART UNIT

PAPER NUMBER

3639

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/779,498

Applicant(s)

YOSHIDA, HIROSHI

Examiner

Igor Borissov

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 2/7/2005 has been entered.

Response to Amendment

Amendment received on 2/7/2005 is acknowledged and entered. Claim 9 has previously been canceled. Claims 1, 4, 5, 7, 10 and 11 have been amended. Claims 1-8 and 10-13 are currently pending in the application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is not within the technological arts.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement

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thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. In re Toma at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

Contrary to the claims in the above-cited cases, in the present application, the claims are completely silent with regard to technology and is purely an abstract idea or process steps that are employed completely without the use of any technology

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whatsoever. The Claims in the present application recite the steps of transmitting data from one location to another without transformation of said data. The method step of “performing a user interface control process ... by displaying the noise countermeasure list information” could be understood as merely providing the user with a printed brochure containing information regarding noise countermeasure. However, the claimed invention must utilize technology in a non-trivial manner (*Ex parte Bowman*, 61 USPQ2d 1665, 1671 (Bd. Pat. App. & Inter. 2001)). Although *Bowman* is not precedential, it has been cited for its analysis.

Furthermore, in accordance with MPEP 2106 (IV)(B)(2)(b) “Statutory Process Claims”, not all processes are statutory under 35 U.S.C. 101. *Schrader*, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts. See *Diamond v. Diehr*, 450 U.S. at 183-184, 209 USPQ at 6 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-788 (1877)).

The Claims in the present application do not appear to satisfy either of the two conditions listed above. First, the claims do not include limitations that would suggest a computer is being used to transform the data from one form to another that would place the invention in the technological arts. Second, disregarding the fact that there is no computer claimed that would physically transform the data, there does not appear to be any physical transformation of data. Thus, there neither appears to be any physical transformation of data from one form to another, which is based upon an algorithm or a calculation by a computer or processor, nor is there any technology claimed that would be used to transform the data.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) a network system, or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.

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Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims are not permitted under 35 USC 101 as being related to non-statutory subject matter. However, in order to consider those claims in light of the prior art, examiner will assume that those claims recite statutorily permitted subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson et al. (US 6,594,799) in view of Van Huben et al. (5,950,201).

Robertson et al. (Robertson) teaches a method and system for facilitating electronic circuit and chip design using remotely located resources, comprising:

Claim 1. Means for storing electronic components and virtual circuit blocks information (tools and services) (column 5, lines 1-10); said tools and services are provided by suppliers (experts) connected to the portal site (column 5, lines 11-12); said tools and services are presented in the format identifying information (tools and services) available, thereby suggesting registration of said information (column 5, lines 12-17);

means for profiling a user for assisting in determining a required tools and services (acquiring circuit information from a user) (column 10, lines 51-52);

means for generating a list of available tools and services to choose a desired component and presenting it to the user at user terminal (column 10, lines 19-40);

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means for determining the desired tools and services based on user's selection (column 10, lines 64-66);

means for charging for performed services (column 12, lines 35-36).

Robertson does not specifically teach that said tools and services includes noise countermeasure information.

Van Huben teaches an automatic design control method and system for computerized design of integrated circuits, including a library of tools for modeling said circuits, wherein noise analysis tools are employed (column 17, lines 58-64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Robertson to include that said tools and services includes noise analyses tools, as disclosed in Van Huben, because it would advantageously allow to design said electronic circuit cheaper and faster.

Claim 2. Said system, wherein said means for charging for performed services comprises means for collecting data on usage of said information (column 9, lines 16-21); said collected information is utilized for charging based on tools usage (column 5, lines 17-19).

Claim 3. Robertson teaches said system, comprising means for storing electronic components and virtual circuit blocks information (tools and services) (column 5, lines 1-10); said tools and services are provided by suppliers (experts) connected to the portal site (column 5, lines 11-12); said tools and services are presented in the format identifying information (tools and services) available, thereby suggesting registration of said information (column 5, lines 12-17).

Robertson does not specifically teach that said information includes *noise countermeasure* information.

Van Huben et al. (Van Huben) teaches an automatic design control method and system for computerized design of integrated circuits, including a library of tools for modeling said circuits, wherein noise analysis tools are employed (column 17, lines 58-64).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Robertson to include that said information includes noise analyses tools, as disclosed in Van Huben, because it would advantageously allow to design said electronic circuit cheaper and faster.

Claim 4. Robertson teaches said system, comprising:

means for profiling a user for assisting in determining a required tools and services (acquiring circuit information from a user) (column 10, lines 51-52);

means for determining and transmitting to the user's terminal the desired tools and services based on user's selection (column 10, lines 64-66).

Robertson does not specifically teach that said information includes *noise countermeasure* information.

Van Huben et al. (Van Huben) teaches an automatic design control method and system for computerized design of integrated circuits, including a library of tools for modeling said circuits, wherein noise analysis tools are employed (column 17, lines 58-64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Robertson to include that said information includes noise analyses tools, as disclosed in Van Huben, because it would advantageously allow to design said electronic circuit cheaper and faster.

Claims 5, 10 and 11. Robertson teaches a computer-implemented method and system for facilitating electronic circuit and chip design using remotely located resources, comprising:

storing electronic components and virtual circuit blocks information (tools and services) (column 5, lines 1-10); said tools and services are provided by suppliers (experts) connected to the portal site (column 5, lines 11-12); said tools and services are presented in the format identifying information (tools and services) available, thereby suggesting registration of said information (column 5, lines 12-17);

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profiling a user for assisting in determining a required tools and services (acquiring circuit information from a user) (column 10, lines 51-52);

generating a list of available tools and services to choose a desired component and presenting it to the user at user terminal (column 10, lines 19-40);

determining and transmitting to the user's terminal the desired tools and services based on user's selection (column 10, lines 64-66);

charging for performed services (column 12, lines 35-36).

Robertson does not specifically teach that said tools and services includes noise countermeasure information.

Van Huben teaches an automatic design control method and system for computerized design of integrated circuits, including a library of tools for modeling said circuits, wherein noise analysis tools are employed (column 17, lines 58-64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Robertson to include that said tools and services includes noise analyses tools, as disclosed in Van Huben, because it would advantageously allow to design said electronic circuit cheaper and faster.

Claim 6. See reasoning applied to Claim 5.

Claim 7. Robertson teaches said method for facilitating electronic circuit and chip design using remotely located resources, comprising:

profiling a user for assisting in determining a required tools and services (acquiring circuit information from a user) (column 10, lines 51-52);

generating a list of available tools and services to choose a desired component and presenting it to the user at user terminal (column 10, lines 19-40);

enabling user to select the desired tools and services (transmitting a selection by the user to the server) (column 10, lines 19-40);

transmitting to the user's terminal the desired tools and services based on user's selection (column 10, lines 64-66);

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conducting authentication of the user and obtaining an authorization for payment for services rendered (transmitting identifier of the client) (column 13, lines 58-60; column 14, lines 14-16).

Robertson does not specifically teach that said electronic components and virtual circuit blocks information includes noise countermeasure information.

Van Huben teaches an automatic design control method and system for computerized design of integrated circuits, including a library of tools for modeling said circuits, wherein noise analysis tools are employed (column 17, lines 58-64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Robertson to include that said tools and services include noise analyses tools, as disclosed in Van Huben, because it would advantageously allow to design said electronic circuit cheaper and faster.

Claim 8. Robertson teaches presenting said tools and services in the format identifying said information available, thereby indicating registration of said information (column 5, lines 12-17).

Claim 12. Said method and system, wherein said means for purchasing comprises means for collecting data on usage of said information (column 9, lines 16-21); said collected information is utilized for charging based on tool usage (column 5, lines 17-19).

Claim 13. See reasoning applied to Claim 12.

Response to Arguments

Applicant's arguments filed 2/7/2005 have been fully considered but they are not persuasive.

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In response to applicant's argument that the prior art does not teach "noise countermeasure information", it is noted that Robertson teaches a method and system for facilitating electronic circuit and chip design using remotely located resources, including various tools and services. Van Huben was applied to show use of noise analysis tools for computerized modeling of integrated circuits.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form PTO-892).

Any inquiry concerning this communication should be directed to Igor Borissov at telephone number (571) 272-6801.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Weiss, can be reached at (571) 272-6812.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

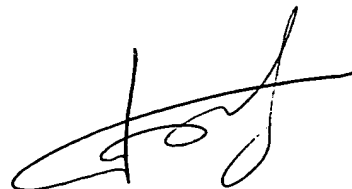
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Igor Borissov
Patent Examiner
Art Unit 3639



IB

4/30/2005